

Feussner-10069772-060211-SEQLIST.txt
SEQUENCE LISTING



<110> Feussner, Ivo
Hornung, Ellen
Fritsche, Kathrin
Peitzsch, Nicola

<120> Fatty acid desaturase gene from plants

<130> 50669

<140> US 10/069,772

<141> 2002-02-28

<160> 16

<170> PatentIn version 3.3

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<212> DNA

<221> CDS

<222> (42)..(1175)

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cgg atg tcg gat cca tct gag gga aaa aac atc ctt gaa cgt gtg cca 104
Arg Met Ser Asp Pro Ser Glu Gly Lys Asn Ile Leu Glu Arg Val Pro
10 15 20

gtc gat cca ccg ttc acg tta agc gat ctg aag aaa gcg att cct acc 152
Val Asp Pro Pro Phe Thr Leu Ser Asp Leu Lys Lys Ala Ile Pro Thr
25 30 35

cat tgc ttt gag cga tct gtc atc cgg tca tca tac tat gtt gtt cat 200
His Cys Phe Glu Arg Ser Val Ile Arg Ser Ser Tyr Tyr Val Val His
40 45 50

gat ctc att gtt gcc tat gtc ttc tac tac ctt gca aac acg tat atc 248
Asp Leu Ile Val Ala Tyr Val Phe Tyr Tyr Leu Ala Asn Thr Tyr Ile
55 60 65

cct ctt att cct aca cct ctg gct tac cta gca tgg ccc gtt tac tgg 296
Pro Leu Ile Pro Thr Pro Leu Ala Tyr Leu Ala Trp Pro Val Tyr Trp
70 75 80 85

ttt tgt caa gct agc atc ctc acc ggc ctc tgg gtc atc ggt cac gaa 344
Phe Cys Gln Ala Ser Ile Leu Thr Gly Leu Trp Val Ile Gly His Glu
90 95 100

tgt ggt cac cat gca ttt agc gac tac cag ttg att gat gac att gtt 392
Cys Gly His His Ala Phe Ser Asp Tyr Gln Leu Ile Asp Asp Ile Val
105 110 115

gga ttc gtg ctc cat tcg gct ctc ctc acc ccg tat ttc tct tgg aaa 440
Gly Phe Val Leu His Ser Ala Leu Leu Thr Pro Tyr Phe Ser Trp Lys
120 125 130

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tat agc cac agg aat cac cac gcc aac aca aat tca ctc gat aac gat	488
Tyr Ser His Arg Asn His His Ala Asn Thr Asn Ser Leu Asp Asn Asp	
135 140 145	
gaa gtt tac att cct aaa cgt aag tcg aag gtc aag att tat tcc aaa	536
Glu Val Tyr Ile Pro Lys Arg Lys Ser Lys Val Lys Ile Tyr Ser Lys	
150 155 160 165	
ctt ctt aac aat cca ccc ggg cga gtg ttc act ttg gtg ttt cgg ttg	584
Leu Leu Asn Asn Pro Pro Gly Arg Val Phe Thr Leu Val Phe Arg Leu	
170 175 180	
act tta gga ttt ccg tta tac ctc tta act aat atc tcg ggc aag aaa	632
Thr Leu Gly Phe Pro Leu Tyr Leu Thr Asn Ile Ser Gly Lys Lys	
185 190 195	
tac ggg agg ttt gcc aac cac ttt gat ccc atg agt cca att ttc aac	680
Tyr Gly Arg Phe Ala Asn His Phe Asp Pro Met Ser Pro Ile Phe Asn	
200 205 210	
gat cgt gaa cgc gtt caa gtt ttg cta tcc gat ttc ggt ctt ctc gct	728
Asp Arg Glu Arg Val Gln Val Leu Leu Ser Asp Phe Gly Leu Leu Ala	
215 220 225	
gta ttt tat gca atc aag ctt ctt gta gca gca aaa ggg gca gct tgg	776
Val Phe Tyr Ala Ile Lys Leu Leu Val Ala Ala Lys Gly Ala Ala Trp	
230 235 240 245	
gta atc aac atg tac gca att cca gta cta ggt gta agc gtg ttc ttc	824
Val Ile Asn Met Tyr Ala Ile Pro Val Leu Gly Val Ser Val Phe Phe	
250 255 260	
gtt ttg atc aca tat ttg cac cac acc cat ctc tca ctc cct cat tat	872
Val Leu Ile Thr Tyr Leu His His Thr His Leu Ser Leu Pro His Tyr	
265 270 275	
gat tca acc gaa tgg aac tgg atc aaa ggc gcc tta tca aca atc gat	920
Asp Ser Thr Glu Trp Asn Trp Ile Lys Gly Ala Leu Ser Thr Ile Asp	
280 285 290	
agg gat ttc ggg ttc ctg aat cgg gtt ttc cac gac gtt aca cac act	968
Arg Asp Phe Gly Phe Leu Asn Arg Val Phe His Asp Val Thr His Thr	
295 300 305	
cac gtc ttg cat cat ttg atc tca tac att cca cat tat cat gca aag	1016
His Val Leu His His Leu Ile Ser Tyr Ile Pro His Tyr His Ala Lys	
310 315 320 325	
gaa gca agg gat gca atc aag cca gtg ttg ggc gag tac tat aaa atc	1064
Glu Ala Arg Asp Ala Ile Lys Pro Val Leu Gly Glu Tyr Tyr Lys Ile	
330 335 340	
gac agg act cca att ttc aaa gca atg tat aga gag gct aag gaa tgc	1112
Asp Arg Thr Pro Ile Phe Lys Ala Met Tyr Arg Glu Ala Lys Glu Cys	
345 350 355	
atc tac atc gag ccc gat gag gat agc gag cac aaa ggt gtg ttc tgg	1160
Ile Tyr Ile Glu Pro Asp Glu Asp Ser Glu His Lys Gly Val Phe Trp	
360 365 370	

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tac cac aag atg taa tcaaaaaggt gtatgtcaat gcaattgtat gcttaattaa 1215
Tyr His Lys Met

375

gttggttaaac tttctattcc gtgtaataaa ttatcattaa gagaaaaaaa aaaaaaaaaa 1275

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Lys Ala Ile Pro Thr His Cys Phe Glu Arg Ser Val Ile Arg Ser Ser
35 40 45

Tyr Tyr Val Val His Asp Leu Ile Val Ala Tyr Val Phe Tyr Tyr Leu
50 55 60

Ala Asn Thr Tyr Ile Pro Leu Ile Pro Thr Pro Leu Ala Tyr Leu Ala
65 70 75 80

Trp Pro Val Tyr Trp Phe Cys Gln Ala Ser Ile Leu Thr Gly Leu Trp
85 90 95

Val Ile Gly His Glu Cys Gly His His Ala Phe Ser Asp Tyr Gln Leu
100 105 110

Ile Asp Asp Ile Val Gly Phe Val Leu His Ser Ala Leu Leu Thr Pro
115 120 125

Tyr Phe Ser Trp Lys Tyr Ser His Arg Asn His His Ala Asn Thr Asn
130 135 140

Ser Leu Asp Asn Asp Glu Val Tyr Ile Pro Lys Arg Lys Ser Lys Val
145 150 155 160

Lys Ile Tyr Ser Lys Leu Leu Asn Asn Pro Pro Gly Arg Val Phe Thr
165 170 175

Leu Val Phe Arg Leu Thr Leu Gly Phe Pro Leu Tyr Leu Leu Thr Asn
180 185 190

Ile Ser Gly Lys Lys Tyr Gly Arg Phe Ala Asn His Phe Asp Pro Met
195 200 205

Ser Pro Ile Phe Asn Asp Arg Glu Arg Val Gln Val Leu Leu Ser Asp
210 215 220

Phe Gly Leu Leu Ala Val Phe Tyr Ala Ile Lys Leu Leu Val Ala Ala
225 230 235 240

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Lys Gly Ala Ala Trp Val Ile Asn Met Tyr Ala Ile Pro Val Leu Gly
 245 250 255

Val Ser Val Phe Phe Val Leu Ile Thr Tyr Leu His His Thr His Leu
 260 265 270

Ser Leu Pro His Tyr Asp Ser Thr Glu Trp Asn Trp Ile Lys Gly Ala
 275 280 285

Leu Ser Thr Ile Asp Arg Asp Phe Gly Phe Leu Asn Arg Val Phe His
 290 295 300

Asp Val Thr His Thr His Val Leu His His Leu Ile Ser Tyr Ile Pro
 305 310 315 320

His Tyr His Ala Lys Glu Ala Arg Asp Ala Ile Lys Pro Val Leu Gly
 325 330 335

Glu Tyr Tyr Lys Ile Asp Arg Thr Pro Ile Phe Lys Ala Met Tyr Arg
 340 345 350

Glu Ala Lys Glu Cys Ile Tyr Ile Glu Pro Asp Glu Asp Ser Glu His
 355 360 365

Lys Gly Val Phe Trp Tyr His Lys Met
 370 375

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<110> Feussner, Ivo
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<120> Fatty acid desaturase gene from plants

<130> 50669

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<141> 2002-02-28

<160> 14

<170> PatentIn version 3.3

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